Freeform Search

Term:	11 and portable
Display: 5	O Documents in <u>Display Format: -</u> Starting with Number <u>1</u> Hit List • Hit Count • Side by Side • Image

DATE: Monday, August 01, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	SPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR	=YES: OP=OR	resuit set
<u>L12</u>	111 and portable	.5	<u>L12</u>
<u>L11</u>	L10 and server	14	
<u>L10</u>	L9 and pda	. 20	<u>L10</u>
<u>L9</u>	online near photo near album	45	<u>L9</u>
<u>L8</u>	L7 and xpath	10	<u>L8</u>
<u>L7</u>	11 and (external near content)	28	<u>L7</u>
<u>L6</u>	13 and (external near content)	. 1	<u>L6</u>
<u>L5</u>	L4 and (source near file)	3	<u>L5</u>
<u>L4</u>	12 and (file near format)	47	<u>L4</u>
<u>L3</u>	L2 and (xml near exchange)	10	<u>L3</u>
<u>L2</u>	L1 and xpath	315	<u>L2</u>
<u>L1</u>	xml near schema	1939	<u>L1</u>

END OF SEARCH HISTORY

First Hit Fwd Refs
End of Result Set

ī

Previous Doc

Next Doc

Go to Doc#

F

Generate Collection

Print

L12: Entry 5 of 5

File: USPT

Jul 5, 2005

DOCUMENT-IDENTIFIER: US 6914695 B2

TITLE: Process of operations with an interchangeable transmission device and apparatus for use therein for a common interface for use with digital cameras

this DSC-F1 Digital Still Camera is a Sony Digital Still Camera which features

Brief Summary Text (11):

infrared wireless connectivity to a PC as well as an internal flash memory capable of storing up to 108 pictures at a 640.times.480--24-bit color (16.7 million colors) resolution. The DSC-F1's built-in 1.8" LCD screen allows for easy viewing with no need to hold the camera up to your eye with "what you see is exactly what you get" and allowing using the LCD monitor, one to instantly review your pictures in the field and delete any unwanted ones. This DSC-F1 provides a wireless (infrared) connection allowing the user to send images to and from the camera's internal storage (4 MB Internal Flash Memory) and a PC with Windows 95, 98 or 2000 (There are drivers for all Microsoft versions.) You can also print pictures directly to Sony's DPP-M55 Digital Color Photo Printer with wireless infrared support -- without the need for a computer. With standard video output, the DSC-F1 can be connected directly to a TV or video monitor, and used as a portable presentation device. The DSC-F1 comes bundled with ArcSoft's PhotoStudio.RTM. DSC image manipulation software. The user can artistically modify the pictures taken by distorting, adding effects, tiling, merging, and other techniques. The images taken are provided with a digital date/time stamp. The digital interface for the DSC-F1 is infrared (which connects to Windows 95 PC with IrDA (infra-red digital adapter) support*) and USB Serial (which connects to a Macintosh or a PC via supplied a cable). The video output is provided by an NTSC Standard Phono Jack. The recording modes are single frame (normal) or continuous, timed, multi-screen, or self-timed. Sony Corporation also supplies a variety of parts for optical and wireless sending of digital information for custom manufactured products (as illustrated by those on their web site for current devices, see the printout thereof provided with this application from the web site http://www.sel.sony.com/semi/number.html) and packages these or similar products as a complete system like the Hewlett Packard 615 package with their own Sony package (see http://www.ita.sel.sony.com/products/archive/imaging/dppm55.html). Other Sony Digital Cameras are in the DSC-D700 Series, where particularly the DSC-D770 at the time of this application was a camera which could be used in the environment of the preferred embodiment of the invention. This DSC-D770, as described at the Sony Web site located at http://www.sel.sony.com/SEL/consumer/ss5/office/digitalstillcamer as/cybershotrtmdigitalstillcameras/dsc-d770_specs.shtml is a Sony Cybershot (trademark claimed by Sony) professional Digital Still Camera: This is a Sony consumer digital still camera with exceptional image quality and features that can only be found on high-end professional cameras. The DSC-D770 features a high performance Progressive Scan 1.5 Million Square Pixel CCD. This will create still images with high quality resolution (up to 1344.times.1024), which is excellent quality for printing or sending still images from a user's computer once they are there. 5.times. Manual Optical Zoom Lens with Manual Focus: Equivalent to a f28 mm to 140 mm zoom lens in a 35 mm camera, this manual zoom lens gives a user flexibility in composing pictures. The manual focus ring allows for a more accurate, so called, professional feel. High Quality Progressive Scan CCD with 1.5

Million Square Pixels Provides high quality still images by reading all of the pixels on the imager (CCD) with a single pass, delivering clean edges and an overall sharper picture quality. 2.5" Advanced Color LCD with Brightness Control (180K Pixels): Use the LCD for playback, or for the viewfinder while taking shots. Large, full color LCD Display viewfinder enables a preview or review of shots right on the camera back with detail and clarity. Removable ATA Type II PC Memory Card or Memory Stick media is the supplied storage medial. A popular storage media, ATA Type II PC memory cards allows storage digital images on these cards. The DSC-D770 will also allow the capture of images on a supplied Sony 8MB Memory Stick Digital Storage Media and ATA Type II PC Card Adapter. The Sony MSAC-PC2 Memory Stick Card Adapter is than twice as fast as the previous MSAC-PC1, so the MSAC-PC2 decreases the read/write time significantly. JPEG or TIFF File Formats: A user may select between JPEG compression, or for best quality, choose the non-compressed TIFF mode to capture images. This Sony Digital Camera provides a variety of automatic and manual modes for capture of images with or without flash and strobe lights, and other features to provide control over an exposure to enhance performance results. This Sony Digital Camera is supplied with a PC Card Reader which allows for easy parallel port connection to a IBM PC compatible computer. The Camera is also supplied with an 8 MB Memory Stick Digital Data Storage (MSA-8A), a Memory Stick PC Card Adapter (MSAC-PC2), a Wireless Remote Controller (RM-S7D) enabling infrared remote control, a Video Cable and other accessories including the MSA-8A/16A/32A/64A Memory Stick Media, MSAC-FD2M Memory Stick Floppy Disk Adapter, a MSAC-PC2 Type II PC Card Reader, and a MSAC-US1 Memory Stick USB Adapter are supplied by Sony for use with the Digital Camera.

Brief Summary Text (13):

Furthermore, as IBM Japan's Research Published in January 2001, at a web site an overview of the Bluetooth technology today. As they said, recently, many types of mobile devices with high-level computing capabilities, such as cellular phones, Cps, digital cameras, and high-performance PDAs, have come into widespread use. In 2000, some of these devices became capable of short range wireless communication empowered by the Bluetooth TM technology. IBM Japan's research area is the computing environments in which such mobile devices are organically connected each other. IBM Japan's web page introduced the Bluetooth technology and ad-hoc networking as an example of their projects.

Brief Summary Text (17):

Some companies including IBM were already shipping Bluetooth products by the end of 2000. Many if not all digital devices such as cellular phones, <u>PDAs</u>, and game machines will be ready to communicate each other with the Bluetooth technology sometime in 2001.

Brief Summary Text (18):

Use of Ad-Hoc Networking makes use of the large scale of infrastructures which are behind the network being used now, such as <u>servers</u>, routers, gateways, phone lines. When we want to use a network in a meeting, we have to hold the meeting in a room with those facilities and might even pay for that. As it would be more convenient, we believe it would be desirable for a network to be used if it could autonomously be generated at the time desired for a meeting. Today it has not been possible to autonomously construct a network at any place, any time, and with anybody by means of the Bluetooth technology, or other wireless technology.

Brief Summary Text (23):

In creating the process of operations described herein, we have obtained use of a set of interchangeable wireless transmitters that allow users to change their transmissions to obtain the maximum benefit of their coverage area. For example, rather than using a standard cellular protocol to communicate from a wireless camera to a <u>server</u>, an end user of using a device which is operable within our process of operations could remove a cellular transmitter and replace it with a wireless LAN transceiver in order to use the higher bandwidth that a LAN

transceiver protocol offers.

Drawing Description Text (9):

FIG. 8 provides an example of a data object generated in a digital camera and transferred to the <u>server</u> of FIG. 7 in accordance with our preferred embodiment.

<u>Drawing Description Text</u> (10):

FIG. 9 illustrates the transfer of a data object from a camera to a remote <u>server</u> or destination mating having attached DASD using TCP/IP.

<u>Detailed Description Text</u> (3):

We note here that Sony sells a Vaio PC and also sells a 11 Mbs Wireless Access Point/Wireless LAN PC Card Bundle for \$599.00 which enables the Vaio PC to communicate with the Access Point via a wireless LAN 802.11b support card which is the industry standard for high-speed wireless LAN. FIG. 1 similarly shows schematically a wireless enabled PC 2, such as an IBM Net Vista X40 which has a wireless keyboard 12 and mouse 4 which can serve also as a Wireless Access Point, and like the IBM Thinkpad can be fitted with a USB cable. FIG. 2 illustrates the Bluetooth environment for a wired LAN for enabling the preferred embodiment of the invention for worldwide TCP/IP access. Although Wired LAN (802.11) and Bluetooth share the same ISM frequency band (2.5 GHz), they operate significantly differently and they cannot intercommunicate. The bridge between them can be made and is made within the illustrated IBM Thinkpad 10 by using the IBM Thinkpad bus to link both a 802.11b access point (such as the Sony wireless LAN Access Point) and a Bluetooth Access point within the IBM Thinkpad which is the first computer of the preferred embodiment as IBM's Thinkpad in accordance with a preferred embodiment is modified to provide both 802.11 and Bluetooth as illustrated, together with any other device, such as an infrared IR device used by digital cameras, which can use the first computer's USB port and cable connection to the specific receiver, as illustrated in FIG. 2. This first computer thus becomes an interchangeable transmission device providing a common interface as a receiver for use with various digital cameras 11 and is serviceable in a wireless network, as illustrated by FIG. 3. Also, the IBM Thinkpad 10 being Bluetooth enabled and sell as having the 802.11b access point can communicate with transceivers illustrated by not only the wireless keyboard 12 and mouse 4, illustrated with respect also to FIG. 1 with the USB port, but also a portable mass storage device 13, a palmsized minicomputer 14, a remote visualization display 15, a cellular phone 16 and a scanner printer 17, which via the Thinkpad can also have USB port reception, as illustrated by FIG. 1.

<u>Detailed Description Text</u> (5):

The process of operations and devices described herein is also enabled for use in the home/consumer market where any business allows the consumer who owns or rents or borrows a wireless digital camera to use it enabling the business to provide the consumer with services, such as; a web page for data storage and <u>online photo</u> <u>albums</u>, or development of digital photos into pictures for consumers who want hard copies of their memories.

Detailed Description Text (6):

The process of operations and devices described herein is also enabled for use in the photo journalism business area where opportunities are present for the usage of wireless digital cameras by journalists as a tool to store their photographic work safely as soon as they are captured. Journalists can capture images and upload them to web base articles or upload and store on <u>servers</u> to avoid lost of priceless data in the field.

Detailed Description Text (12):

As we will describe the model, the reader will imagine one or more of the businesses represented by a resort which we will use as the example. As illustrated by FIG. 3, the customer <101> represents the customer, or in the case of our example, a family on vacation. FIG. 3 shows the customer interface <102> which can

be either a human interface or electronic (wed-based or multimedia link) to a kiosk or customers room where a first computer is provided. While shown in FIG. 3 as part of the Intranet, the location, as noted of the customer interface <102> can be within the wireless network and there can be more than one first computers which provide both the customer interface and the point for reception of information from the digital camera usage area <107>. These networks, as illustrated by FIG. 3 are bounded by dotted lines representing the Intranet and the wireless network. The customer interface <102> will set up the customer's account and communicate customer information between the registered camera distribution center illustrated in FIG. 3 as the Hardware Distribution <104> for wireless digital cameras node. FIG. 3 illustrates the location of the Development lab for various data types <108> and the control point central server <103> which is situate in both the intranet and wireless network.

Detailed Description Text (13):

The central <u>server</u> <103> of FIG. 3 controls customer accounts. The central <u>server</u> sets up each account and manage the stored data and data received under each account in data storage <109>. So in our example when a customer takes a picture within the resort representing the wireless network the data goes to the central <u>server</u>. The central <u>server</u> through the registered camera ID which is transferred with the data from the first computer's wireless receiver <105> stores the image under the customers account. The customer can then access their photos on an intranet site or through the customer interface's human interface applicable to the intranet to select preferred photos.

Detailed Description Text (14):

The hardware distribution center for wireless digital cameras <104> is located in a convenient location to the area of usage. Here the customer registers the camera to be used and receives and returns borrowed cameras and from the distribution center which may be at a registration kiosk or in the customer's room information on customer status is sent to the customer interface and to the central server via that customer interface <102> as illustrated in the preferred embodiment.

Detailed Description Text (15):

The customer then proceeds to the usage area FIG. 3 Block <107> in the case of our example the resort. The usage area is covered with a wireless network most likely bluetooth. The network consist of wireless transmitters FIG. 3 Block <106> and receivers FIG. 3 Block <105> that uploads photographic data and camera ID to the server.

Detailed Description Text (16):

After data is sent to the central <u>server</u> it is stored in data storage <109> in the customers account. The customer data along with customer preferences provided through the interface are sent to the development lab <108> where an album or digital album on a CD is developed for the customer. The product can then be picked up at a distribution center or in the case of a resort sent to the customers room. This product can be displayed on the customer interface in the form of a first computer equipped with a media viewer, of the kind supplied with Windows 2000. This model can also be used for advertising by posting photos from the Intranet or from the CD on the Internet or though customer's albums, which they might show to potential customers.

<u>Detailed Description Text</u> (18):

The digital pictures along with camera ID are transferred through a wireless carrier <202> such as the wireless network of FIG. 3 to the Digital development site <u>server</u> <203> corresponding to the central <u>server</u> of FIG. 3. Data is stored under customer account in the data storage unit <207> which performs the function of the storage unit <109> of FIG. 3.

Detailed Description Text (19):

Through the wireless carrier <202> interface or through a PC with voice modem or telephone connection <205> data can be sent to a development lab <204> to create hard copies of the photographs from the data stored in data storage. Data is uploaded to the server where the customer requests the service through the customer interface <206> either through an existing account that is setup to automatically print the pictures or through an online request and data submission. The digital data will then be processed into hard copy photographs and shipped to the customers address from a site designated as the site for development lab and shipping <204>. The customer can also have a setup where their digital pictures are automatically uploaded to their customer web site <208> with customer data storage or stored in data storage space <207> which is rented. This data storage space in a preferred embodiment functions as a portable digital image store which can access a first computer device and which has for the purpose a transceiver for transmitting multimedia data including digital image data via a wireless protocol, including that of either the Bluetooth protocol and wireless LAN protocol, or both.

Detailed Description Text (22):

The protocols initially supported by these interchangeable transmitters representing the wireless transmitter <106> of FIG. 3 are selected from digital protocol groups including: bluetooth, wireless LAN, Infrared (IF) which are the preferred set of features incorporated in the first computer acting as a receiver, but with additions including satellite when the receiver has a satellite modem, RF, and cellular WAP (wireless application protocol) as these known protocols may be adapted for the stated use and are available now in specific enabled <u>PDAs</u> and personal computers as receivers. The first computer can have attached to the other protocol devices by USB port couplings.

<u>Detailed Description Text</u> (23):

Currently, digital cameras and <u>PDAs</u>, and similar wireless devices have a limited memory. Once their internal memory is used up, or the available swappable memory is exhausted, the user is required to access a personal computer to free up the storage space before continuing using these devices. This is done as illustrated by FIG. 3.

Detailed Description Text (24):

By using the process of FIG. 3, the common interface first computer acts as a port for a wireless enabled mass storage device represented by the data storage <207> which may be a portable Bluetooth Data Storage device with transceiver for transmitting to a first computer device of FIG. 4 and the Customer's Data Storage represented by the Customer Web Site Customer Data Storage <208> and one which would allow data to be transferred to a portable hard drive through a wireless connection and the use of the IBM Thinkpad's pluggable storage drives. This provides the end user of a digital camera, PDA, or other wireless device, with a virtually inexhaustible amount of local storage.

<u>Detailed Description Text</u> (25):

The use of an IBM Thinkpad as shown in the block diagram of FIG. 6 provides a wireless enabled mass storage device in the environment illustrated. The Thinkpad provides with its plug in floppy storage a local, portable storage device that is enabled with a wireless interface provided by the IBM Thinkpad illustrated by FIG. 2, having not only the Bluetooth, wireless LAN and infrared image reception capability, but also other reception capability provided by a receiver port providing serial, USB, and IDE communication ports. This makes it possible for users of wireless devices, who need larger storage capacities, to have a simple solution to their problem.

<u>Detailed Description Text</u> (31):

In accordance with a preferred embodiment of the invention a digital camera is provided with an interface enabling a direct wireless uplink to the intranet/internet. As pictures are taken, they are transferred directly to a

intranet/Internet/Private <u>server and from that server</u> they are viewable on a private and/or public web page.

Detailed Description Text (32):

A Wireless Digital Camera as shown in FIG. 7 is preferably a Sony DSC-D770 provided with a wireless transceiver to allow direct communication with a remote <u>server</u>. Software running on the remote <u>server</u> detects and uploads data to the client's directory and makes the image accessible on the client's web page/s. In this embodiment, the private <u>server</u> may be one having the same feature as that of the first computer of FIG. 2, which is an IBM Thinkpad having both a wireless LAN access point and a Bluetooth access point and having an USB port for receiving wireless communications adaptable to that port.

Detailed Description Text (33):

In this embodiment, the user interface from the Digital Imaging Device, the Sony DSC-D770, uses Bluetooth wireless communication user interface to transmit the images to a local device functioning as the first computer and called the transceiver which is coupled to the Internet/Private Server. The first computer in the form of a local device (transceiver) may be a long distance transmitter such as a cell phone used to connect to a remote server, a local Bluetooth hub connected to a server or Bluetooth enabled local mass storage. These images are uploaded to the server via the intranet/internet and made directly available for viewing on public or private web pages by the service provider at the end user interface. In the case where Bluetooth enabled local mass storage is used for temporary storage, the images are not available on the internet until the storage device comes within range of a Bluetooth enabled transmitter.

Detailed Description Text (35):

Once images are uploaded to the remote <u>server</u> they are made available on the web pages for the client through software. A program running on the <u>server</u> monitors changes in the clients upload directories. Once an upload is detected, the program regenerates the html for that clients web directory, providing a link to the new image. Information entered at the camera interface at the time the picture is taken may be used to direct the program as to where the image should appear in the clients web directory (marked by subject category, marked as private, marked as public, marked as send to e-mail distribution list X).

Detailed Description Text (37):

A <u>PDA</u> type interface for the digital camera would include an area which the user would write on to enter data. This special area of the camera would recognize the strokes entered by the user and would convert these strokes to typical alphanumeric ASCII characters. This writing area could be integrated by incorporation into the digital camera itself or it can be provided as a plugable unit. Appropriate data to be entered by the user could include information to appear in the caption of the image (e.g. "Photo of John and Sally taken at the corner of 42nd and 8th in New York City) or commands to be issued to the digital camera (e.g. "Send image to NYPD server at 555-1211). The aforementioned data would be entered using a stylus, pen, fingertip, or other similar device.

<u>Detailed Description Text</u> (44):

The FIG. 8 below specifies an example of a data object generated in the camera and transferred to the <u>server</u>. Maximum size of this object as defined is approximately 196 Kbytes plus the image size, though the average object size will only be about 200 bytes plus the image data.

Detailed Description Text (47):

The Command field illustrated in FIG. 8 contains two fields. The first field indicates the number of bytes contained in the second field. The second field, containing up to 64 Kbytes, is used to send commands to the server. An example of such a command might be to create or destroy pages, or to delete images, change

page links, and the like.

Detailed Description Text (51):

When the data object is received by the application software running on the <u>server</u>, the data fields are separated. The User ID field is used to determine which account the data object is to be processed for and if the data object is valid. The software then directs the output for the object processing to the specified user account directory.

Detailed Description Text (55):

Transfer of the data object from the Camera to the remote <u>server</u> is illustrated by FIG. 9 showing the use of standard TCP/IP in connection with a destination machine having attached DASD, either directly or over a Storage Area Network.

Detailed Description Text (56):

The data object is received by the wireless receiver illustrated in FIG. 9 and is sent to the receiving computer's IP stack. This routes the data from the receiving computer to the destination machine using standard TCP/IP protocols. Once the data is received at the destination machine, the <u>server</u> software on the machine would process the data object (previously described).

Detailed Description Text (57):

The use of standard TCP/IP provides the user with a means to direct the data to a different <u>server</u>, such as a home PC, where the data object can be processed with the application software running on that machine.

CLAIMS:

- 1. A method for enabling at least one first user to provide in a web session one or more objects stored as recording image data taken with a digital camera in a computer system having a web control site server having multi-media storage capability; a first computer device for use by a first user, the first computer having access for communication with said server via a wireless network; a plurality of other servers having multi-media storage capability having access to said web control site server; a second computer having access to said control site server via the web; in which computer system said method comprises the steps of: selecting at said second computer a web session enabling a plurality of pages to be accessed at a URL, providing a request to one of said other servers having said URL for a plurality of pages which a user desires to access, executing by said one other server routines allowing said user to select and view one or more pages for a web session prepared for a web session by accessing a file prepared for such purpose by a multi-media routine executed after said first computer is accessed by a first user, said first computer multi-media routine receiving from said first user digital image data at a receiver port of said first computer device from a transmitter attached to a digital image store and registered to said first user as a digital camera which is enabled to access said first computer device to cause execution of said multi-media routing to create in said computer system said file prepared for web session access after said first computer device is accessed by said first user.
- 8. A method according to claim 1 wherein said first computer device is accessed from a <u>portable</u> digital image store having attached thereto a transceiver for transmitting multi-media data including digital image data via a wireless protocol.

Previous Doc Next Doc Go to Doc#

WEST Print Selection Page 1 of 1

Print Selection

Select All Clear Cancel Print Print First Page Section: Page(s): Print Copy: 1							
Select?	Document ID	Section(s)	Page(s)	# Pages to print	Database		
V	20050131767	all	all	19	PGPB,USPT,USOC,EPAB,JPAB,DWPI		
- [V]	20040250205	all	all	18	PGPB,USPT,USOC,EPAB,JPAB,DWPI		
V	20030030839	all	all	18	PGPB,USPT,USOC,EPAB,JPAB,DWPI		
[V]	20020103813	all	all	22	PGPB,USPT,USOC,EPAB,JPAB,DWPI		
I V	6914695	all	all	N/A	PGPB,USPT,USOC,EPAB,JPAB,DWPI		

Building	Room	Printer
ran 💌	3c18 🕶	gbrcptr 💌